

REMARKS

Claims 1-27 are pending, with claims 1, 12, and 21 being independent. By virtue of this response, independent claims 1, 12, and 21 are amended.

Claims 1-23 are rejected under 35 U.S.C. 112(2) as being indefinite.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,200,842 to Monnier (Monnier).

Claims 2-5 are objected to as being dependent on a rejected base claim, but would be allowable if re-written to contain all the limitations of their respective base claims and any intervening claims. Claims 12-20 would be allowable if re-written or amended to overcome the rejection(s) thereto under 35 U.S.C. 112(2). Claims 24-27 are allowed. Applicant thanks the Examiner for indicating the presence of allowable subject matter in these claims.

First, regarding the rejection of claims 1-23 under 35 U.S.C. 112, second paragraph, Applicant respectfully requests that this rejection be withdrawn in light of the following comments.

Regarding independent claims 1, 12, and 21, the Office Action asserts that the claim limitations "alternating between outputting the first signal and second signal over a pre-determined time to generate an output signal that is substantially at the desired frequency" renders the claim indefinite since the output signal is generated by alternating between the first signal and the second signal which results in variable frequency, different duty cycles; it is unclear how this output signal is substantially at the desired frequency." In response, Applicant respectfully asserts that the language of claim 1, 12 and 21 is clear and definite in light of Applicant's specification. Nonetheless, in order to further prosecution of the present application, Applicant has amended independent claims 1, 12, and 21, as discussed in more detail below.

Page 6, lines 22-27 describes that a desired frequency  $f$  may be obtained as an intermediate frequency between two generated frequencies by dithering between the two generated frequencies over the course of some pre-determined (minimum) amount of time.

The office action, in rejecting claim 1 as indefinite, appears to neglect the recitation that "altering between outputting the first signal and second signal" occurs over the cited "pre-

determined time." That is, the desired frequency is described and claimed with respect to the pre-determined period of time, and claims 1, 12, and 21 have been amended and further specify this point.

For further discussion on this point, Applicant refers the Examiner's attention to, for example, page 7 lines 19-27, page 10, lines 3-16, and FIGS. 1 and 3 of Applicant's specification.

Further regarding claim 21, Applicant respectfully submits that the amendments thereto fully address the remaining rejections under U.S.C. 112(2). Accordingly, Applicant requests that the rejections of claims 1-23 under U.S.C. 112(2) be withdrawn. Since claims 2-23 are not subject to any other grounds of rejection, Applicant respectfully submits that these claims are in condition for allowance.

Regarding the rejection of claim 1 under 35 U.S.C. 102(b) as being anticipated by Monnier, Applicant respectfully submits that Monnier does not disclose or properly suggest all of the features of independent claim 1.

For example, independent claim 1 recites:

A method comprising:  
outputting a first signal having a first frequency that is lower than a desired frequency;  
outputting a second signal having a second frequency that is higher than the desired frequency; and  
alternating between outputting the first signal and the second signal over a pre-determined time to generate an output signal that is substantially at the desired frequency with respect to the pre-determined time.

Paragraph 5 of the Office Action asserts that Monnier discloses an apparatus and a corresponding method for generating an output signal by alternating between a first frequency and a second frequency that is one-half of the first frequency in response to a control signal(pulses), and refers to Figures 1-2. Specifically, the office action asserts that Monnier discloses such a method as "including the steps of a) outputting a first signal [22] having a first frequency that is lower than a desired frequency; b) outputting a second signal [12] having a second frequency that is higher than the desired frequency; and c) alternating [20] between

outputting the first signal and the second signal over a pre-determined time to generate an output signal that is substantially at the desired frequency.”

In response, and in light of the above discussion of claim 1, Applicant submits that, in fact, Monnier does not disclose or properly suggest, “alternating between outputting the first signal and the second signal over a pre-determined time to generate an output signal that is substantially at the desired frequency with respect to the pre-determined time” as recited in independent claim 1.

In fact, Monnier does not suggest the claimed “desired frequency” at all. For example, as just pointed out, Monnier merely teaches alternating between a first signal and a second signal (that is one-half of the first signal’s frequency), based on a control signal. Therefore, Monnier does not disclose or properly suggest the outputting of any intermediate frequency between these two signals that could fairly be said to disclose or suggest Applicant’s claimed “desired frequency,” as recited in claim 1, nor does Monnier disclose a “pre-determined time,” with respect to which the output signal having substantially the desired frequency is generated. Applicant respectfully request allowance of claim 1 for the above reason.

Accordingly, Applicant respectfully requests that the rejection of claim 1 under U.S.C. 102(b) be withdrawn, and that claim 1 be allowed.

Based on the above, all claims are believed to be in condition for allowance, and such action is hereby requested in the Examiner’s next official communication.

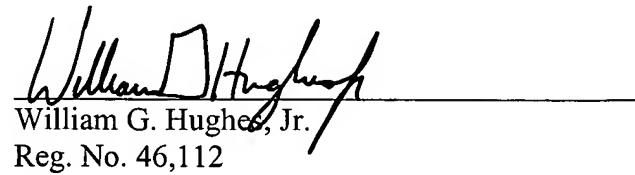
Applicant : Manus P. Henry  
Serial No. : 10/671,431  
Filed : September 26, 2003  
Page : 12 of 12

Attorney's Docket No.: 12780-025001

Enclosed is a \$120 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: January 28, 2005

  
\_\_\_\_\_  
William G. Hughes, Jr.  
Reg. No. 46,112

Fish & Richardson P.C.  
1425 K Street, N.W.  
11th Floor  
Washington, DC 20005-3500  
Telephone: (202) 783-5070  
Facsimile: (202) 783-2331

40259828.doc